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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,721	03/08/2001	Hatsuhiko Harashina	2101-8	4010

7500 12/26/2002
Nixon & Vanderhye
8th Floor
1100 North Glebe Road
Arlington, VA 22201-4714

EXAMINER

SZEKELY, PETER A

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 12/26/2002

4

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-4

Office Action Summary	Applicant(s)	
	HARASHINA, HATSUHIKO	
	Applicant No.	Art Unit
	09/786,721	1714
	Examiner	
	Peter Szekely	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5-7, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The meaning of "polyurethane-series" and "polyamide-series" is not known (claim 5). The indefinite word "derivative" renders the other claims indefinite. Carbon dioxide is a derivative of all organic compounds and polymers. It is derived by burning.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-19 are rejected under 35 U.S.C. 102(b or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Amann et al. 4,230,606, Abolins 4,242,254, Doyama et al. 5,236,988, Yoshitani et al. 5,314,912, Orikasa et al. 5,036,120 or Gareiss et al. 6,093,759, in view of Hilt et al. 3,884,867, Kaiser et al. 3,951,908, Cerny et al. 4,424,240, Yamauchi et al. 5,965,639 or Imahashi et al. 6,130,282.
6. Amann et al. disclose polyoxymethylene and a melamine-formaldehyde condensate reacted with phenol in claims 1 and 2, isophthalic acid, terephthalic acid

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diamide, triazine derivatives, polyamides, polyurethanes and red phosphorus in column 7, lines 11-45. Abolins teaches a blend of polyacetal, polycarbonate, polyamide and polystyrene in claims 5 and 6, phosphorus compounds in column 6, lines 44-48. The amount of flame retardant is shown in column 4, lines 21-26. Doyama et al. teach polyarylate, polycarbonate, polyamide and polyoxymethylene in claim 2 and tris- (2,3-dichloropropyl) phosphate in column 20, lines 57-58. Yoshitani et al. recite polyoxymethylene, polycarbonate and polyamide in claim 1, and phosphorus containing flame-retardants in column 11, lines 43-46. Orikasa et al. divulge a blend of polyoxymethylene and polycarbonate in claim 1, phosphorus containing flame retardants in column 9, lines 6-11 and guanidine nitride in column 9, lines 12-13. For the concentration of flame-retardants, see column 8, line 47. Gareiss et al. reveal polyoxymethylene, polycarbonate and polyamide in claim 2 and phosphazanes in claim 1. Hilt et al. present polyoxymethylene and red phosphorus in claim 1 and coating the red phosphorus in the paragraph overlapping columns 1 and 2. Kaiser et al. display masterbatching impregnated red phosphorus in column in column 3, lines 54-68 and polyacetals, polyamides and SAN polymers in column 2, lines 44-66. Cerny et al. describe polyacetals and other polymers in the paragraph overlapping columns 1 and 2 and encapsulated red phosphorus in column 2, lines 42-55. Yamauchi et al. discuss masterbatching and treating red phosphorus in column 13, lines 25-67 and column 19, lines 10-65 and polyoxymethylene in column 5, line 52. Imahashi et al. relate polyacetal in column 6, line 58 and coated red phosphorus in column 6, lines 30-36. Applicants' claims are not novel. In the alternative, it would have been obvious to one

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having ordinary skill in the art, at the time the invention was made, to stabilize the red phosphorus, in order to avoid phosphine formation and to masterbatch it to ensure better dispersion.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is 703-308-2460. The examiner can normally be reached on Tuesday-Friday 7:00 a.m.-5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Peter Szekely
Primary Examiner
Art Unit 1714

P.S.
December 23, 2002